Appl. No. 10/666,034

Amdt. dated March 3, 2005

Reply to Office Action of November 3, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1-17. Canceled.
- 18. (Currently amended) A method for forming a semiconductor device, the method comprising:
- a) providing a semiconductor substrate having a first region of a first conductivity type;
- b) forming a second region of a second conductivity type in the semiconductor substrate such that the first and second regions form a p-n junction; and
 - c) forming a first charge control electrode; and
- d) forming a first and second charge control electrodes adjacent to but insulated from one of the first and second regions, along a dimension parallel to flow of current through the semiconductor device, wherein the first charge control electrode is adapted to be biased differently than the second first charge control electrode.
- 19. (currently amended) <u>A method for forming a semiconductor device, the method comprising:</u> The method of claim 18 further comprising

providing a semiconductor substrate having a first region of a first conductivity type;

forming a second region of a second conductivity type in the semiconductor substrate;

forming a trench in the semiconductor substrate and wherein;

forming the <u>a</u> first charge control electrode <u>in the trench by comprises</u> depositing a conductive material in the trench and then etching the deposited conductive material; and

forming a second charge control electrode in the trench by depositing a conductive material in the trench and then etching the deposited conductive material, wherein the

first charge control electrode is adapted to be biased differently than the second charge control electrode.

- 20. Canceled.
- 21. (Original) The method of claim 18 further comprising: forming a trenched gate structure in the semiconductor substrate.
- 22. (Original) The method of claim 18 wherein the first and second charge control electrodes comprise polysilicon.
- 23. (Original) The method of claim 18 wherein the method further comprises forming a plurality of biasing elements on or in the semiconductor substrate, wherein the biasing elements are adapted to bias the first and second charge control electrodes at different voltages.
- 24. (Original) The method of claim 18 wherein the semiconductor device is a power MOSFET.

25-29. Canceled.

- 30. (Original) A method for forming a field effect transistor comprising:
- a) providing a semiconductor substrate of a first conductivity type having a major surface, a drift region, and a drain region;
- b) forming a well region of a second conductivity type in the semiconductor substrate;
 - c) forming a source region of the first conductivity type in the well region;
 - d) forming a source contact layer on the source region;
 - e) forming a gate electrode adjacent to the source region;
- f) forming a charge control electrode in the drift region, wherein the charge control electrode is adapted to be biased at a different potential than the gate electrode or the source contact layer, and is adapted to control the electric field in the drift region; and
 - g) forming a dielectric material around the charge control electrode.

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- 31. (Original) The method of claim 30 wherein the gate electrode is a trenched gate electrode.
- 32. (Original) The method of claim 30 further comprising: forming a biasing element, wherein the biasing element is adapted to bias the charge control electrode.